



# CALIFORNIA WIC PROGRAM

## Pronto Non-Invasive Hemoglobin Screening

### CA Bloodwork Pilot Protocol

#### Referring to the Medical Provider for Bloodwork

1. WIC staff are required to attempt to obtain bloodwork through the health care provider, before conducting a hemoglobin screening at WIC. The attempt to obtain bloodwork shall include the following:
  - a. When scheduling an appointment for a participant, staff shall check to see if bloodwork is due to expire by the next WIC appointment for any participants within the family. The easiest way to do this is to use the ISIS *Document and Schedule Nutrition Education Contacts* screen. The date (month/year) and the results of the previous bloodwork result is displayed in red font near the top of the screen beneath the participant's name, as shown in the sample ISIS screen below:

	STACY	SCOTT	MALCOLM
CAT/EDD H&H:	B <b>04/12 11</b>	I	C <b>07/11 10</b>
DOB:	07/05/88	04/01/12	07/01/10
NON-WIC ED:			
F/U ED INT L:	G	G	G
JUN 2012	<u>GB04</u>	<u>GA</u>	<u>SR</u>
JUL 2012	<u>      </u>	<u>GI20</u>	<u>      </u>
AUG 2012	<u>GA</u>	<u>      </u>	<u>      </u>
SEP 2012	<u>      </u>	<u>      </u>	<u>      </u>
OCT 2012	<u>GB04</u>	<u>SM</u>	<u>GA</u>
NOV 2012	<u>      </u>	<u>      </u>	<u>      </u>
DEC 2012	<u>      </u>	<u>GA</u>	<u>      </u>
JAN 2013	<u>GA</u>	<u>      </u>	<u>SM</u>
FEB 2013	<u>      </u>	<u>GI21</u>	<u>      </u>
MAR 2013	<u>      </u>	<u>      </u>	<u>      </u>
APR 2013	<u>SD</u>	<u>SR</u>	<u>GA</u>
MAY 2013	<u>      </u>	<u>      </u>	<u>      </u>
JUN 2013	<u>      </u>	<u>      </u>	<u>      </u>

Test Date  
Test Results

Reminder:  
A child with a below normal hemoglobin result (less than 11) requires a repeat test every 6 months until normal biochemical result is documented in ISIS.

- b. If bloodwork will expire for a family member by their next WIC appointment, regardless of the appointment type, staff shall give the participant a WIC referral form and ask the participant to take it to their health care provider to

obtain the required bloodwork and bring the completed form to their next WIC appointment.

If the participant does not have a health care provider, staff shall:

- a. Offer a health care referral.
  - b. Instruct the participant on the steps needed to get the bloodwork completed and the WIC referral form filled out.
  - c. Ask the participant to bring the completed WIC referral form to their next WIC appointment.
2. If the participant arrives at their next WIC appointment without the bloodwork results, the participant will be provided the WIC services as scheduled and issued food instruments. Additionally, staff shall ask the participant if the bloodwork has been completed or if it is scheduled to be completed.
- a. If the bloodwork has been completed, staff shall ask the participant to sign the Consent to Release Information form and call the provider for the results or, if the participant meets the criteria for screening (below), shall proceed with Pronto device screening.
  - b. If the bloodwork has not been completed and the participant meets the criteria for screening (below), staff shall proceed with Pronto device screening.

### **Criteria for Screening**

Pronto device may be used for screening children, weighing 22 pounds or more. Screening is most successful if child is at least 24 months of age. Pronto device may also be used for adults.

### **Preparation for Screening**

1. Have participant wash hands or use a hand sanitizer. A 70% isopropyl alcohol pad can be used for cleaning the finger. If the participant has nail polish on her fingernails, proceed with the screening. Other states are reporting very few problems with nail polish.
2. Participant should have been seated for approximately 2 minutes before performing the screen.
3. Rest the hand/arm on the table or desk. Hand/arm should be above waist level.
4. No movement or talking.

### **Site Selection**

1. Select non-dominant hand. Preferred finger is ring finger or middle finger. Do not ask to remove jewelry or watch due to liability reasons.
2. Select sensor size by;
  - a. Child sensor: 22 lbs. – 110 lbs.
  - b. Adult sensor: 66 lbs. or more

## **Testing**

1. Clean sensor with alcohol wipe.
2. Place sensor on finger insuring the tip of the finger is touching the finger stop. If the participant has a long fingernail, the fingernail can extend over the finger stop.
3. Insure the detector is placed directly over the patient's nail bed.
4. Make sure the initial reading on the device is at least 1 (This initial reading is not the hemoglobin value; it is the perfusion measurement.). Readings less than .7 will result in an unsuccessful screening. Lightly rubbing and warming the finger before screening may help increase the reading.
5. Instruct the participant not to talk or move during the screening.
6. If the result is inappropriate [values greater than 17], re-do the test immediately.
7. Adjust for altitude if necessary for your area. See chart in WPM 210 -11 (page 4).
8. Document results in ISIS
9. It is not necessary to turn off the device between the screenings; however, turning off the device will extend the battery life.

## **Tips for Screening Small Children**

1. If more than one member of the family needs screening, start with the oldest family member(s).
2. If the child is awake, make eye-contact and chat with the child during the first 30 seconds of the screening. The child can be screened sitting in their parent's lap, facing outward.
3. Staff should test facing the child; keep an eye on the finger in the sensor. If the finger starts to move, continue chatting with child and lightly place your hand on the child's hand.
4. Children can be screened while asleep or in a drowsy state.

## **Batteries for the Pronto device**

The Pronto device is USDA approved for use with alkaline batteries. Each device takes 4 AA batteries. Alkaline batteries last for about 250 tests. The manufacturer does *not* recommend using rechargeable batteries. When rechargeable batteries are used the tests may take longer. Rechargeable batteries should be replaced *daily*.



## **CALIFORNIA WIC PROGRAM**

### **Pronto Non-Invasive Hemoglobin Screening**

#### **Frequently Asked Questions**

1. **What type of screenings will the Pronto be used for at WIC?**

**Answer:** Hemoglobin screenings only (not hematocrit)

2. **Are the screening results from a Pronto accurate?**

**Answer:** The screening results from a Pronto machine are comparable to the results from a Hemocue (finger stick) machine. The Pronto machine is approved for use in medical settings. The Pronto device is FDA approved.

3. **How long does the screening take?**

**Answer:** Generally 60 seconds, unless there is excessive movement.

4. **How soon will I know the results?**

**Answer:** The results are displayed on the LED screen immediately upon completion of the screening.

5. **Does the screening hurt?**

**Answer:** The screenings do not cause any pain or discomfort. The finger is placed in the sensor, which gently envelopes the finger.

6. **How does the device work?**

**Answer:** The Pronto uses multiple wavelengths of light to obtain oxygen saturation (SpO2) and pulse rate (BPM) readings. It also accurately and non-invasively measures and displays total hemoglobin. The Pronto measures total hemoglobin using similar principles as pulse oximetry with additional wavelengths of light to obtain the measurements.

7. **Are there any long term effects or risks from the screenings?**

**Answer:** There are no known ill-effects as a result of the screenings. There are no known hazards to pregnant or breastfeeding women or their babies.

8. **What hazardous waste is produced from Pronto screenings?**

**Answer:** None. Requires no lab consumables or waste disposal.

9. **How do we dispose of the sensor devices when all the tests are used up?**

**Answer:** Currently there is no special disposal process for the Pronto sensors.

10. **Why should WIC staff make initial attempts to obtain the bloodwork from the participant's doctor, when the Pronto device is available to use?**

**Answer:** It is important that all WIC participants have a health care provider to provide preventative screenings, monitor their health, and take care of them when they are sick.

If a participant does not bring in a hemoglobin test result because they do not have a health care provider, WIC staff are to refer the participant to a health care provider. This is one of the federally mandated functions of the WIC Program.

Since hemoglobin tests are part of routine preventative screenings provided by the health care provider, participants may have already had the hemoglobin completed and it is wasteful for these tests to be repeated at WIC. WIC staff should attempt to obtain results from tests already completed.

11. **How will WIC staff respond to low hemoglobin readings on the Pronto device, as compared to low hemoglobin readings from a test done at a medical office or lab?**

**Answer:** Counseling and education for low hemoglobin, although individualized for the particular needs of a participant, would generally address low iron in the diet. Whether the low hemoglobin result is from a Pronto screening or from a test done at a medical facility, WIC staff may address increasing iron-rich and vitamin C-rich foods. Regardless of the source of the low reading, WIC staff should refer the participant to their provider for follow up, or refer the participant to a provider if they don't have one. It is important for the participant to receive proper medical evaluation and follow up. WIC counseling and referrals should not differ based on whether the result are from the Pronto device or a finger stick.

12. **Is there a WIX report to track the results of the Pronto question in ISIS?**

**Answer:** In development with ISIS changes.